Technical description and operating instructions

Motiv 10

Hometheater system

5.1 Cinema Set · 5.1 Concert Set

Teufel

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Original packaging
We recommend that you hold on to the packaging of all your new Teufel products, as we only accept loudspeakers back within the initial eight-week return period if they are shipped in their ORIGINAL PACKAGING. We do not provide packaging boxes separately.

Complaint
In case of complaint we require the following data to process it:

1. Invoice number
You can find it in the proof of purchase (enclosed to the product) or in the order confirmation sent to you as a pdf document, e.g. 4322543
2. Serial number and batch number
You can find it on the back of the device,
e.g. Lot No.: M0 04007480121A

Thank you for your co-operation!

Contact
If you have any questions, suggestions or criticisms, please contact our support team:

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D-10783 Berlin (Germany)

Phone: +49 30 300 9 300
Fax: +49 30 300 9 30 30
www.teufel.eu

Terms of warranty
Lautsprecher Teufel GmbH provides a twelve-year warranty for loudspeakers and a two-year warranty for amplifiers and electrical components, starting at the purchase date. The warranty covers all materials and time needed. The warranty does not cover devices damaged as a result of improper use or electrical/mechanical overloading. The original Teufel invoice is your proof of warranty. This warranty applies exclusively to loudspeakers, amplifiers and electronic components purchased by consumers from Teufel for private usage. The warranty does not apply to loudspeakers, amplifiers and electronic components sold to consumers through third-party dealers. For third-party products supplied together with the Teufel system, the terms of warranty of the manufacturer in question apply. When Teufel products are resold privately, the warranty may be transferred to the new owner. For this, the new owner requires the original Teufel invoice.

Returns policy
For all products purchased directly from Teufel and from www.teufel.eu, Teufel provides an eight-week right of return with a money-back guarantee. You will not have to pay any additional shipping costs for returning Teufel goods. Teufel covers the freight for transporting the goods back to the factory, and we will promptly refund the purchase price to your account once we have verified the condition of the goods.

You may only return individual components from a set if Teufel offers these components for sale separately. If you return one or more individual components from a set, this voids the discount that Teufel provides on the sale of components as a set. This means that for individually returned components from a set, you will be refunded the difference between the set price and the sum purchase price of the individual components you decide to keep, i.e., we will deduct the discount that applies to set purchases.

If you decide to return any or all of the purchased goods, please always contact us first.
Note that we can only process and accept returned goods if you have telephoned us in advance and discussed the required returns procedure.

Technical specifications
For technical specifications of the products described herein, please refer to our website www.teufel.eu.

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Manual version 1.2

Introduction Motiv 10

Dear customer of Lautsprecher Teufel,
Thank you for purchasing the loudspeakers of the company Lautsprecher Teufel.

You have purchased a powerful loudspeaker system because Teufel Lautsprecher systems are produced very accurately and equipped with high quality components. We recommend Motiv 10 to rooms up to 35 m². Please read the whole manual before set-up and keep it for future reference in a safe place.

Our engineers are at your disposal for further information, phone +49 30 300 9 300. You can also contact us via the email contact form on our website **www.teufel.eu**. Please have your invoice number ready so that we can allocate you promptly and provide optimum support.

BEFORE you consult us in case of a question please read the excerpt "Problems and Solutions" on page 12 of these operating instructions and visit our web page www.teufel.eu, here you can find answers to many questions in the area »FAQ/Support«.

Please also note our safety instructions contained in this package and start using loudspeakers only after having read this page.

Please write down the serial number located on the label of the box together with the invoice number here:

My **INVOICE NUMBER** is:

.....

My **SERIAL NUMBER** is:

.....

These serial and invoice numbers help us to process your request directly during service.

Teufel

Unpacking

Turn the flaps on the upper side of the box backwards, remove the styrofoam parts and carefully take the loudspeaker out of the box. If necessary, insert the enclosed grids into the front of the loudspeaker.

We strongly recommend you not to dispose of the boxes. If any reparation is needed in future, the original packaging will protect your valuable loudspeaker during transportation in the best way. We cannot be held liable for damages resulting from defective packaging.
The Motiv 10 set is delivered as a complete system in two different configurations:

5.1 Concert Set · 5.1 Cinema Set

These sets consist of three different component types in different numbers:

First check the system for completeness

Attention:
At least during the eight weeks before the deadline for returning, you should keep the packaging box because ONLY if returned in the delivered ORIGINAL PACKAGING the whole purchase price can be refunded!

A 1000 SW

M0 10 FCR

M0 10 D

Scope of delivery

5.1 Concert Set:
- 1 x A 1000 SW subwoofer
- 5 x M0 10 FCR loudspeaker
- 1 x Mains cable for subwoofer
- 20 x Rubber pads
- 5 x Dowels
- 5 x Dowel screws

5.1 Cinema Set:
- 1 x A 1000 SW subwoofer
- 3 x M0 10 FCR loudspeakers
- 2 x M0 10 D loudspeakers
- 1 x Mains cable for subwoofer
- 2 x Wall brackets for M0 10 D
- 20 x Rubber pads
- 9 x Dowels
- 9 x Dowel screws

Mains cable for A 1000 SW subwoofer

Rubber pads for loudspeakers

Dowels and dowel screws

Wall brackets for the M0 10 D

Screws for wall-mounting

Accessories

Connection cable and stands are not included in the set because of diverse requirements of customers. However, you receive a suitable cable for the loudspeaker, a subwoofer cable and stands directly from us. You can find all accessories options for the Motiv 10 set on the following page.

Accessories (optional)

Optional accessories for Motiv 10 set

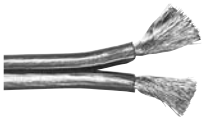
Here you can find an overview of suitable Accessories for your Motiv 10 set:

If required, you can easily order all optional accessories e.g. via internet on our homepage: www.teufel.eu

Teufel cable for loudspeakers 2 x 2.5 mm²

Extremely flexible copper strand (650 wires) with transparent coating and marking for right polarity. The 2 x 2.5 mm² cable can be used for a distance of up to 15 m, for longer distances we recommend a thicker 2 x 4 mm² cable. We have adjusted our cable according to multiple customers' requests to practice-oriented pre-assembled length.

Teufel cable for loudspeakers 2 x 4 mm²



This cable consists of hundreds of fine wires made of oxygen-deficient copper. It transmits the signals of the amplifier to the loudspeakers clearly and interference-free. Transparent thick but still flexible plastic coating protects the wires and bears almost everything.

Teufel NF mono RCA cable

Optimal connection between the active subwoofers and AV receiver/amplifier by means of screening to protect from interferences by other sources. Stable gold-plated plugs provide a safe contact. The cable exists in graduated lengths from 2.5 up to 15 m; thus, the subwoofer can be placed really everywhere.

Y-adapter

1 x socket for a 2 x plug. Enables stereo line-in RCA inputs on the subwoofer which increase its loudness.

Stand M 10 P

A newly developed stand exclusively for the Motiv 10 Set. Safe fastening thanks to proven Teufel construction principle (mounting on the bottom of the box by means of a screw). Suitable for the model M0 10 FCR (not for M0 10 D!) - because the dipoles require wall-mounting!

Teufel banana plug

These high quality all-round plugs by Teufel enable a low-cost as well as safe connection of your loudspeakers to the amplifier or receiver. A stable screw terminal keeps all cables with a diameter up to 6 mm firmly fixed. Elastic spring contacts and a real gold plating guarantees plug connections with extremely low resistance. Delivered in pairs - one plug is marked red and one plug black. The Motiv 10 set requires 10 pieces.

Teufel subwoofer spikes

These four massive cones provide an effective isolation from the floor and thus streamlining of the low-frequency rendering. Besides there are small washers to protect the parquet.

Installation of the 5.1 configuration

General Notes on Installation

Due to its unobtrusive design it is easy to integrate Teufel Motiv 10 set into your living room. However, especially for home theatres you should observe some criteria for installation to achieve the optimum sound of the Teufel loudspeaker set.

For home theatre systems it is recommended to concentrate on the actually used area, i.e. room (area) where the TV and the seats are located. It can be helpful to position the display or the screen in the center relative to the position of the listener.

The installation instructions given (on the following pages) represent the optimal solution for perfect multi-channel sound in your house. The space, partner or furnishing do not always allow such an optimal positioning. Try to conform with the guidelines as much as possible. Modern AV receivers offer various possibilities to compensate electronically any concessions made during installation. In general the rule is:
You can always test on the basis of our recommendations what works acoustically and optically best for your space. Let your ears (and eyes) decide!

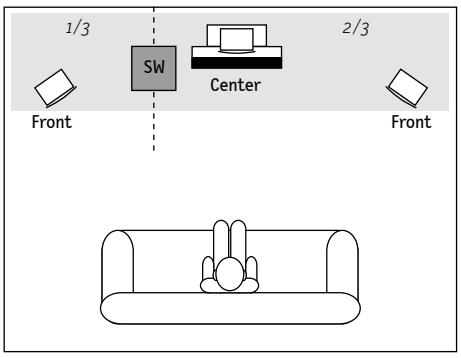
Center loudspeakers

Since the Center renders dialogues of actors, this loudspeaker must be placed opposite to the central listening position as close to the centre as possible under the screen or over it. We recommend to bend MO 10 FCR slightly towards or away from the listener if it has been placed at a height of less than 40 cm or more than 1.20 m.

Front loudspeaker

The front loudspeakers are set up according to the old tradition for stereo (distance to the listener = distance between the left and the right box) near the screen at the same distance on the left and right side or fastened on the wall. The use of optional stands M 10 P provides automatically an optimal height of the satellite boxes. When placing on the wall or shelf it is essential to choose the placement height between 40 cm and 1.20 m.

It is important that the Center and Front loudspeakers are placed approximately in the same straight line or in a circular arc slightly curved towards the screen. The homogeneity of sound can be otherwise distorted due to runtime differences.



**** Tip***
To achieve good bass rendering it has been proven helpful to place the subwoofer in a 1/3 to 2/3 proportion, thus, not exactly in the middle of the front or side wall but closer to one of the walls.

We recommend to place the subwoofer in the the grey area.

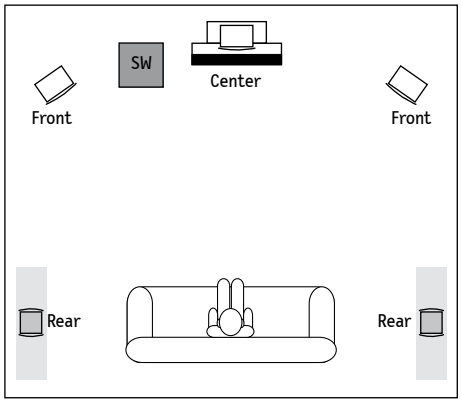
Subwoofer

The subwoofer location can be chosen arbitrarily and does not influence other loudspeakers if the recommended crossover frequency of 120 Hz is observed. The ideal position for the subwoofer is on a straight line between the two front satellites*. But you can also try out any other place in the room. It is preferable when the front part of the subwoofer (with the front grid) can radiate freely in the direction of the room and is not directed towards the wall (if however this is the case: Minimum distance from the wall: 0.50 m).

Installation of the 5.1 configuration

Rear (side) installation version A: Cinema set
The MO 10 D dipoles should be mounted laterally to the listener at the height of 1.40 to 2.10 m. The Teufel dipoles already have a suitable wall mount included in the scope of delivery.

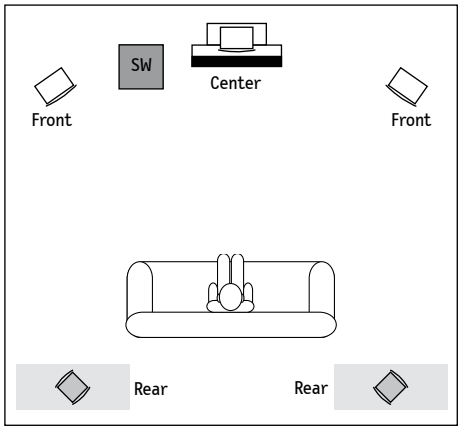
Then the dipoles radiate with their front side forwards (in the direction of TV/screen) and with the rear side of the boxes backwards (in the direction of the rear side of the room) so that no direct sound is heard from the position of the listener just the reflections from the wall. The distance between the dipole side, which radiates backwards, and the rear wall of the room must be at least 10 cm.



Rear installation version B: Cinema set
Alternatively you can install the dipoles by means of a wall bracket behind your seat at the height of 1.40 to 2.10 m.

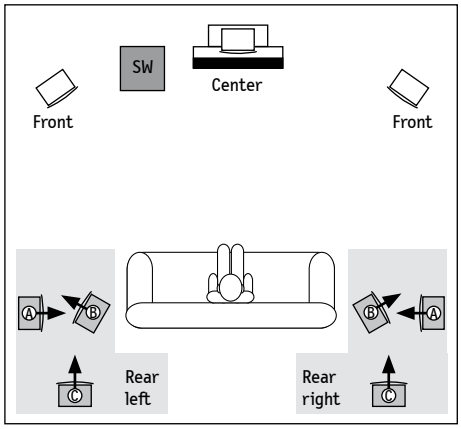
We recommend to place the Rear loudspeakers in the rear grey area.

We recommend to install MO 10 D with the help of the intended wall mount and then align it diagonally at approx. 45° angle with one side of the membrane to the rear wall and the other side of the membrane to the side wall. As a result the dipoles reflect from the rear and side wall and, thus, generate the needed acoustic scattering. The distance between the dipole front side and the room side wall must be at least 10 cm.



We recommend to place the Rear loudspeakers in the rear grey area. Choose position A, B or C. The arrow shows the radiation direction of the box.

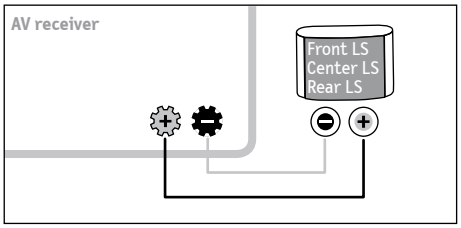
Rear installation version C: Concert set
Both boxes for the rear space must be set up on the left and right either laterally or reversely from listener's position. The optimal position is on the left and right side laterally displaced by approx. 20° from the parallel position to listener.
It is always advisable that the distance from the rear loudspeaker to the listener's position should exceeds 1 m.
But if you sit closer ensure that the front side of the box does not point directly at you but that it is rather directed to the wall using angling of the loudspeakers. Or you can increase the distance by setting up the boxes farther away.



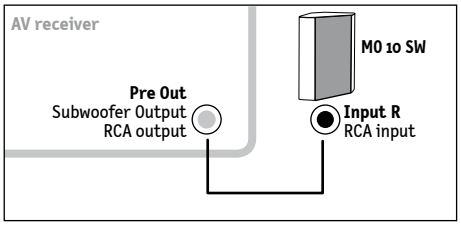
Connection

Front, Center and Rear loudspeakers
The Motiv 10 set in the 5.1 configuration with an active subwoofer can be connected to any common Dolby Digital /DTS-/5.1-/6.1-/7.1-AV receiver/ amplifier. Do not occupy the rear renter input jack of the 6.1/7.1 receiver.

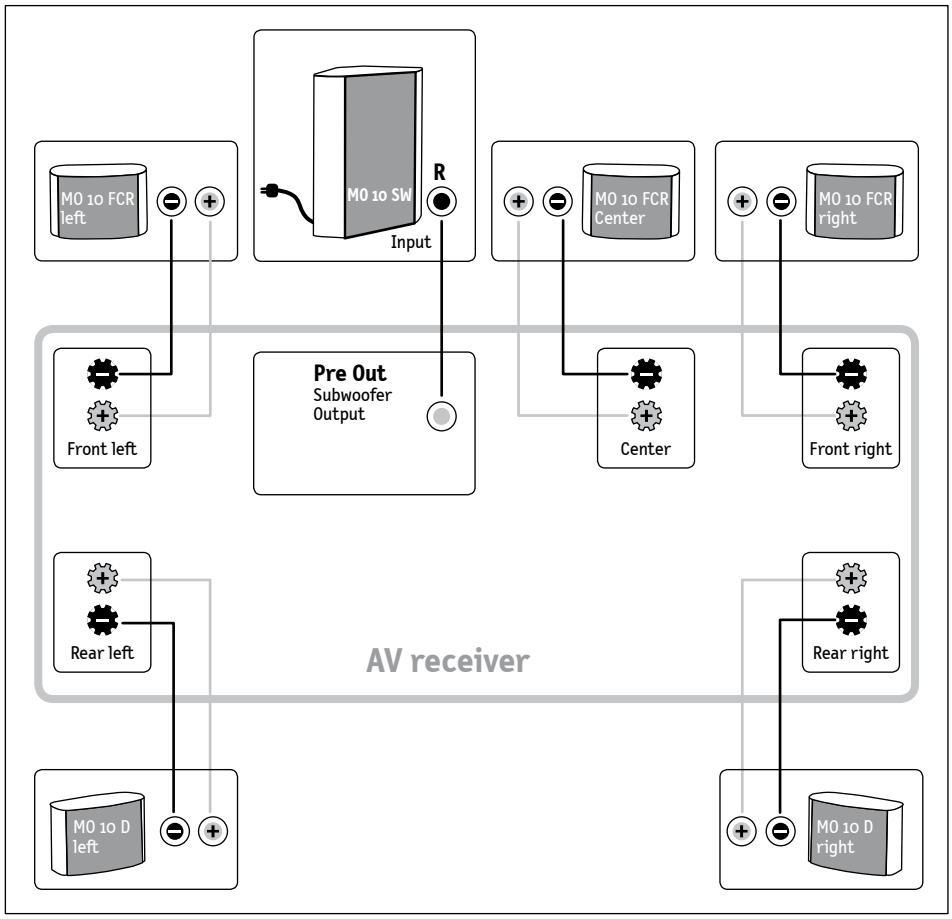
Subwoofer
Connect the subwoofer output (Sub Out) of your Dolby Digital /DTS AV receiver / amplifier via a mono RCA cable using the right line input of the subwoofer. The left input (line input L) remains unoccupied. Only if the Y-adapter is used (see Accessories page 6), you can use both inputs of the subwoofer.



Load capacity
Please note that the information on the load capacity of the satellite loudspeakers refers only to use with AV receiver which protects the satellites using internal filtering from a more intensive load by woofer signals.



Plus and Minus
Please make sure that the loudspeaker is wired with correct polarity - as shown on the picture. Almost all loudspeaker cables are marked to make it easier for you. Mostly the insulation of one of the cables is serrated while the other one is smooth. Some manufacturers also colour-code both cables. Note that the marking in your installation always has the same meaning, i.e. the cable with the serrated coating must be consistently connected to the plus pole.



Connection of the loudspeakers to the AV surround receiver using the example of the 5.1 Cinema Set.

**** Load capacity***
Please note that the information on the load capacity of the satellite loudspeakers refers only to the use with AV receiver which protects the satellites with the help of internal filtering against a more intense load by low frequency signals.

Mounting of the Satellites

M0 10 FCR
The satellites M0 10 FCR can be located in three ways: shelf, wall, stand.

For installation on the shelf please fasten four enclosed rubber pads on the corners of the satellite enclosure.

For wall mounting please use the reverse holding clamp that can be fixed on a screw fastened on the wall.

Besides you should bond two small rubber pads to the rear side of the enclosure, e.g. on the left and right of the rear.

Fixation on the optional stand M 10 P (see page 7) is carried out using the screws enclosed to the stand - see mounting instructions of the stand.

M0 10 D
In order for the dipoles to unfold their full potential, fasten them on the wall. Preferably at a height of 1.40–2.10 m (see also page 10 of these operating instructions). To do so please use the enclosed wall bracket which can be mounted on the wall using three screws and fastened to the enclosure using one screw.

Please note that in this case the box must be mounted UPSIDE DOWN. This means: the connecting panel faces UPWARDS!

Set-up of the AV receiver / amplifier
Select the parameters “small” or “normal” (not “large”) for the satellites of your system Motiv 10 set in the bass/loudspeaker management program (“Speaker Setup”) of the AV receiver. This ensures that the satellites can be fully loaded and that the subwoofer and Front loudspeakers harmonise perfectly with each other.*

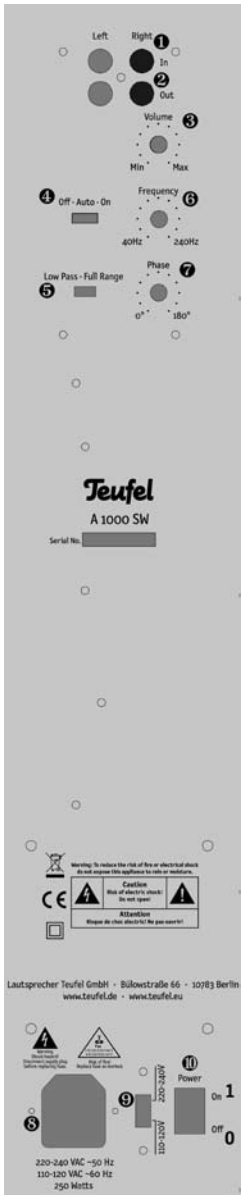
The subwoofer must be set to “On” in the bass/loudspeaker management (“Speaker Setup”) of the receiver. The suitable cross-over frequency that has to be set is 120 Hz for Motiv 10.

Settings for the subwoofer
Set the subwoofer to "Full-Range" operation (see ❻ page 11). This means that the phase and the cross-over frequency are determined by the AV receiver - its settings are commanding.
Modern AV receivers set the subwoofer phase correctly during automatic adjustment of the subwoofer in the "Speaker Setup" program. In this respect, the phase of the subwoofer should be left in position "0°".

The volume setting of the subwoofer will deviate slightly when playing music compared to the home theatre depending on the quality of the record and mixing. While massive woofer part prevails with highly efficient DVDs, the desired level cannot be heard when playing music (especially if the set has been preset for optimal DVD rendering). In this situation your personal taste is deciding for the best compromise correlation between both sources.

In this way you can find the best volume of the subwoofer:
We recommend to avoid choosing the automatic setting by means of an integrated measuring device (if the receiver has such an option) but rather to set the subwoofer in the bass management/loudspeaker management ("speaker setup") at higher value between +4 and +12 dB, in order to ensure functioning of the Standby mode and then to determine the optimal level of the subwoofer through listening tests.

Control elements of the subwoofer



❶ Input
(High-level input)
Here you can connect your mono RCA cable (possibly with an additional Y-adapter) of the subwoofer output ("Subwoofer Out") of your AV receiver or amplifier.

❷ Output
(High-level output)
Here you can connect further subwoofers in order to increase subwoofer level or to equalise the room resonance.

❸ Volume
(Level controller)
With the help of this controller you can regulate the volume of the subwoofer. Set the preliminary level in the bass management of your AV receiver or amplifier to a high value between +4 and +12 dB. Set the level controller of the subwoofer at one fourth of the control range. Turn it slowly to set the desired volume while the noise generator of the AV receiver is working.

❹ Off–Auto–On (Switch-on automatic)
In OFF position the subwoofer is switched off, in ON position it is switched on. If you set the switch to AUTO, the subwoofer switches on automatically if it gets a sound signal from the AV receiver. It is switched off without a signal after 20 minutes. We recommend the AUTO mode.
Please note: To disconnect the subwoofer completely from power supply you have to set the switch to ❿ OFF.

❺ Low Pass – Full Range
(Low-pass filter - full range)
The implemented control options such as phase ❼ and frequency ❻ are active in the LOW PASS position. The AV receiver or the amplifier takes over control in the FULL RANGE position (recommended).

❻ Frequency (diplexer)
Select the frequency at which the subwoofer stops its rendering and the satellite loudspeakers of the set start rendering. This controller is activated only if you set the switch ❺ to LOW PASS. We recommend this constellation only if you use the subwoofer from a source without a diplexer, e.g. from a pre-amplifier output (Pre Out) of a stereo amplifier. When using an AV receiver or amplifier we recommend you to set the switch ❺ to FULL RANGE. In this case the frequency controller is not important.

❼ Phase
Set the phase of the subwoofer relatively to your Front and Center loudspeakers. If the installation site is located in the grey area of the drawing on page 9, set the phase to 0°, otherwise to 180°. This controller is activated only if you set the switch ❺ to LOW PASS.

❽ Fuse
Under the socket for the mains cable you can find the mains fuse of the subwoofer.

❾ Mains voltage switch
This switch serves as an adapter for the subwoofer and the local power supply voltage. It is ABSOLUTELY necessary that the selected voltage value matches the local one. In Germany for example the position 220–240V is correct.

❿ Power (main switch)
In OFF position the subwoofer is switched off and completely disconnected from the power supply, if it is in ON position, it is switched on. Please also observe the explanations regarding the switch ❹.

Operational LED on the front side
If the power switch ❿ is in OFF position, the operational LED on the front side is not lit. If the subwoofer is switched on by the power switch ❿, the operational switch lights up red or blue, depending on the position of the OFF-AUTO-ON sliding switch❹. If the subwoofer is switched on in continuous operation (switch ❹ at ON), the operational LED lights up blue. If the subwoofer is in standby mode (switch ❹ at AUTO), then the operational LED lights up red at first. As soon as the subwoofer gets the audio signal, it is switched on and the LED lights up blue. If the subwoofer switches off after 20 minutes because it has not received any signal, the LED lights up red. If the power function ❹ is OFF, the LED lights up red.

Symbols

The lightning symbol with an arrowhead in an equilateral triangle indicates for the user that there is a not isolated dangerous electrical voltage within the system housing so that there is a risk of electric shocks.

The exclamation mark in an equilateral triangle as it is shown on the device is supposed to draw user's attention to important operation and service instructions.

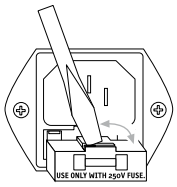
This product is conform to the Directives of the Council of the European Community 2004/108/EC and 2006/95/EC.

The garbage bin symbol on the rating plates or output stages of our products implies that Lautsprecher Teufel guarantees disposal of these loudspeakers and subwoofer according to regulations, i.e. according to Electrical and Electronic Equipment Act.

This product complies with DIN EN 61140 (VDE 0140-1) and IEC 60417 of protection class II. It only requires a two-pin round plug (included) and not an earthed plug. The plug has a reinforced or double-shielded casing to prevent electrical shock.

Attention:
The separating equipment of this equipment is the mains plug, this separating equipment must be usable without difficulties.

The subwoofer does not work



If, after switching on, the power lamp on the front side of the device is not lit, please replace the fuse (see page 11, position ❽).

If the power lamp is lit, turn down the subwoofer level ("Level") to "Min", disconnectthe subwoofer RCA cable at the amplifier, carefully rise the level ("Level") and touch the internal salient contact of the RCA plug with the finger. If any humming or clicking noise can be heard, then either the amplifier is defective or it hasincorrect settings. If the subwoofer remains silent in both cases, contact our service.

The subwoofer hums

This humming noise can be caused by connected devices or interferences in the mains. In most cases, the excessive humming is caused by the following:

1. The woofer is connected to another electri cal circuit than the rest of the system. Ensure that all interconnected devices (including PC) are connected to the same electrical circuit or socket.

2. The antenna connected to the system or TV has a different earth potential than the socket. To test just pull out all the antenna cables from the wall socket. If there is no humming noise anymore, you need a so called sheath current filter which is available in electronic device shops. It is plugged in between antenna socket and TV device or receiver.

3. It may be helpful to buy an additional mains filter in order to eliminate the humming noise by connecting it to all used devices. Please agree upon the right of return for the filter in case it does not lead to any positive results.

4. Occasionally the use of a multiple socket has been proved to generate humming interferences. Test not to use such a multiple socket and connect the plug of the subwoofer directly to the wall socket.

5. You can also try turning the plug around once and plugging it into the wall socket upside down.

6. To locate the humming precisely check if the subwoofer is hum-free with another power supply in another room (e.g. by means of an extension cable). Furthermore you can try disconnecting the RCA connection between subwoofer and receiver in order to eliminate possible influence of connected components.

Cleaning

To enjoy the product of Lautsprecher Teufel the longest observe following tips:

Do not expose the enclosure to direct sunshine. Avoid extreme temperature differences and preserve your loudspeakers from humidity. To clean the loudspeakers use only a lightly moistened or dry cloth. Avoid using alcohol-containing or abrasive cleaning agents. Collect dust from the diaphragm with a dry cloth very carefully. Pull out the mains plug from the socket of the device before cleaning.

Technical data

You can find technical data in the product description on our homepage www.teufel.de

Teufel

For questions, comments or critic, please contact our service:

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Gewerbehof Bülowbogen · Bülowstr. 66
D-10783 Berlin (Germany)

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Fax: +49 30 30 09 30 30
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